February 18, 2000

Summary of Potential (b)(2) Fish Actions for Oct 99 – Sep 2000 Water Year

UA = upstream actions (i.e. stream flows to improve anadromous fish habitat)
DA = Delta actions (i.e. export reductions to improve anadromous fish habitat)

Oct – UA - Improve instream flow conditions with releases from CVP reservoirs to improve upstream migration, spawning, and egg incubation for fall-run chinook salmon:

Stanislaus R - a portion of the 15,000 AF of purchased water (B3) was added to the base flow. American R , Sacramento R, and Clear Cr - flow objectives were met with hydrology.

Nov – UA - Improve instream flow conditions with releases from CVP reservoirs to improve upstream migration, spawning, and egg incubation for fall-run chinook salmon:

Stanislaus R - a portion of the purchased water was added to the base flow. American R , Sacramento R, and Clear Cr - flow objectives were met with hydrology.

Dec – UA - Improve instream flow conditions with releases from CVP reservoirs to improve upstream migration, spawning, and egg incubation for fall-run chinook salmon:

Stanislaus R - purchased water and (b)(2) water were added to the base flow. American R , Sacramento R, and Clear Cr - flow objectives were met with a combination of hydrology and/or (b)(2) (net change in storage metric).

Dec - DA - Curtail CVP exports during critical outmigration periods to increase survival of outmigrating juvenile salmon, particularly the recently listed spring-run chinook salmon:

The amount of CVP export reduction was determined by a combination of "biological triggers" and the quantity of (b)(2) water available. Interior used approximately 95,000 AF of (b)(2) water for CVP export reductions between December 10-23, 1999 to protect outmigrant juvenile salmon and to conduct a CWT smolt survival evaluation.

Jan – UA - Improve instream flow conditions with releases from CVP reservoirs to improve upstream migration, spawning, egg incubation, rearing and outmigration for anadromous fish, including listed runs of chinook salmon and steelhead trout:

Stanislaus R ~ 1,800 AF of (b)(2) water was added to the base flow. American R , Sacramento R, and Clear Cr - flow objectives were met with a combination of hydrology and/or (b)(2) (net change in storage metric). The net change in storage as of January 31, 2000 was zero in Trinity and Shasta reservoirs, approximately 2,000 AF in Folsom Reservoir and approximately 4,000 AF in New Melones Reservoir.

Jan - DA - curtail CVP exports during critical outmigration periods to increase survival of outmigrating juvenile salmon, particularly the recently listed spring-run chinook salmon:

Based on "biological triggers", Interior used approximately 55,000 AF of (b)(2) water for CVP export reductions during January 17-25, 2000, to protect outmigrant juvenile salmon.

Feb/Mar – UA - Improve instream flow conditions with releases from CVP reservoirs to improve upstream migration, spawning, egg incubation, rearing and outmigration for anadromous fish, including listed runs of chinook salmon and steelhead trout, and improve conditions for estuarine species:

90% forecast - Stanislaus R, American R , Sacramento R, and Clear Cr - flow objectives will be met with a combination of hydrology and/or (b)(2) (net change in releases metric).

50% forecast - same as the 90%

Feb/Mar - DA - Curtail CVP exports during critical outmigration periods to increase survival of outmigrating juvenile salmon and steelhead:

90% forecast - the amount of CVP export reduction will be determined by a combination of "biological triggers" and the quantity of (b)(2) water available ($\simeq$ 35,000 AF).

50% forecast - same as the 90%

Apr/May – UA - Improve instream flow conditions with releases from CVP reservoirs to improve upstream migration, spawning, egg incubation, rearing and outmigration for anadromous fish, including listed runs of chinook salmon and steelhead trout, and improve conditions for resident estuarine species:

90% forecast - Stanislaus R, American R , Sacramento R, and Clear Cr - flow objectives will be met with a combination of hydrology and/or (b)(2) (net change in releases metric).

50% forecast - same as the 90%.

Apr/May - DA - Curtail CVP and SWP exports during critical outmigration periods to increase survival of outmigrating juvenile chinook salmon, and other anadromous and resident estuarine fish:

90% forecast - the CVP and SWP exports will be reduced to a combined 1500 cfs for 31 days (consistent with VAMP period).

50% forecast - the CVP and SWP exports will be reduced to a combined 2250 cfs for 45 days (consistent with an extended VAMP period).

Jun/Jul – UA - Improve instream flow conditions with releases from CVP reservoirs to improve rearing and outmigration for anadromous fish, including steelhead trout, and improve conditions for other anadromous fish and resident estuarine species:

90% forecast - Stanislaus R, American R , Sacramento R, and Clear Cr - flow objectives will be met with a combination of hydrology and/or (b)(2) (net change in releases metric) There is no (b)(2) water available for meeting steelhead temperature objectives.

50% forecast - same as the 90%.

Jun/Jul - DA - In June, ramp CVP exports up slowly for additional protection of juvenile salmon and resident estuarine fish and/or reduce exports in July consistent with x2 location and June export levels:

90% forecast - there is no (b)(2) water available to implement this protection measure in June.

50% forecast - the amount of CVP export reduction will be determined by a combination of "biological triggers" and the quantity of (b)(2) water available ($\simeq$ 62,000 AF).

Aug/Sep – UA - Improve instream flow conditions with releases from CVP reservoirs to improve rearing for anadromous fish, including steelhead trout, and improve conditions for other anadromous fish and resident estuarine species:

90% forecast - Stanislaus R, American R, Sacramento R, and Clear Cr - flow objectives will be met with a combination of hydrology and/or (b)(2) (net change in releases metric) There is no (b)(2) water available for meeting steelhead temperature objectives.

50% forecast - same as the 90%.